

GERSHGORN, M.A.; KAZARNOVSKIY, D.S.; FILONOV, I.G.; KUTSENKO, A.D.; UL'YANOV, D.P.

Production of low-alloy bessemer rail steel. Stal' no.5:404-408  
My '61. (MIRA 14:5)

1. Ukrainskiy institut metallov i zavod im. Dzerzhinskogo.  
(Bessemer process) (Steel alloys)

FILONOV, I.G.

The Dzerzhinskii Metallurgical Plant is 75 years old.  
Stal' 24 no.5:389-391 My '64. (MIRA 17:12)

1. Direktor Dneprovskogo metallurgicheskogo zavoda im.  
Dzerzhinskogo.

BESEDIN, P.T.; SOROKIN, A.A.; FILONOV, I.G.; KARPUNIN, A.M.;  
CHEPELEV, P.M.; SHCHERBINA, P.A.; AVDEYEV, M.G.; KUTSENKO,  
A.D.; TSELYUKO, V.I.; CHERNEVICH, Ye.M.; ORGIYAN, V.S.;  
CHERNETA, Z.A.

Improving the technology of the heat treatment of rails  
at the Dzerzhinskii Plant for the purpose of increasing  
their durability in tracks. Stal' 24 no.5:445-448 My '64.  
(MIRA 17:12)

1. Dneprovskiy metallurgicheskiy zavod im. Dzerzhinskogo i  
Ukrainskiy nauchno-issledovatel'skiy institut metallov.

*I. O. Filonov*

Soviet Book Exploration

Phase I Book Exploration

24(7)

U.S. Universitet

MATERIALY I VESOGRUNOVO Sovershchaniya po spektroskopii, 1956.  
Ch. II. Atomnaya spektroskopiya [Materials of the 10th All-Union Conference on Spectroscopy, 1956, Vol. 2: Atomic Spectroscopy]  
Dviny, 120-vo L'vovskoye uch. - 1958. 568 p. (Series: Iss:  
Fizicheskaya shkolka, vyp. 4(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po  
spektroskopii.

Editorial Board: G.I. Landberg, Doktorant, (Berg, M.);  
B.S. Epshtein, Doctor of Physical and Mathematical Sciences;  
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Candidate of Physical and Mathematical Sciences; V.S. Milivanchuk  
(Candidate), Doctor of Physical and Mathematical Sciences; A.S.  
Glebov, Doctor of Physical and Mathematical Sciences;  
M.I. Gusev, Tech. Sc.; G.V. Sarayuk.

PURPOSE: This book is intended for scientists and researchers in  
the field of spectroscopy, as well as for technical personnel  
using spectrum analysis in various industries.

CONTENTS: This volume contains 177 scientific and technical studies  
of atomic spectroscopy presented at the 10th All-Union Conference  
on Spectroscopy in 1956. The studies were carried out by  
members of scientific and technical institutes and include  
extensive bibliographies of Soviet and other sources. The  
studies cover many phases of spectroscopy: spectra, rare earths,  
electromagnetic radiation, physicochemical methods for controlling  
uranium production, physics and technology of gas discharge,  
spectroscopy, abnormal dispersion in metal vapors,  
spectroscopy, and the combustion theory, spectrum analysis of ores  
and minerals, photographic methods for quantitative spectrum  
analysis of metals and alloys, spectral determination of the  
hydrogen content of metals by means of isotopes, tables and  
atlases of spectral lines, spark spectrum analysis, analysis  
of the parameters of calibration curves, determination of trace elements, spectrum analysis in  
metallurgy, thermomechanics in metallurgy, and principles and  
practice of spectrochemical analysis.

Card 2/31

Materials of the 10th All-Union Conference (cont.)	Soviet Book Exploration
Aydarov, T.K. Spectrum Analysis of Lithium in Brines	512
Pavlyuchenko, N.N., V.M. Akulovich, and I.O. Filionov. Spectral Determination of Microelements in Mineral Slates	516
Fertonov, G.A. Use of Emission Spectra Analysis in the Chemical Reagent Industry	519
Kartashov, N.Yu., A.F. Paseko, and R.A. Silin'shch. Use of Spectrum Analysis in Citric Acid Production	521
Palatnik, I.I. Determination of Calcium Oxide in Flue Gas by Means of a Stylometer	522
Pisarev, V.D., and T.I. Ivanova. Quenching or Cyanogen Bands in Spectrum Analysis of Solutions	524
Baltov, V.V., and K.I. Ionova. Statistical Study of Variations in the Parameters of Calibration Curves	528

Card 2/31

PAVLYUCHENKO, M.M.; AKULOVICH, V.M.; FILONOV, I.O.

Spectral determination of trace elements in mineral salts.  
Fiz.sbor. no.4:516-519 '58. (MIRA 12:5)

1. Institut khimii AN BSSR.  
(Trace elements--Spectra)

PILONOV, K.

Bargusin State Preserve. IUn.nat.no.9:21-22 D '56. (MLRA 10:2)

1. Direktor zapovednika.  
(Bargusin State Preserve)

FILONOV, K.

Interesting aspect of the diet of Marmota kamtschatica in the  
Barguzin Reserve. Izv. Irk. gos. nauch.-issl. protivochum. inst,  
21:279-281 '59. (MIRA 14:1)  
(BARGUZIN RANGE—MARMOTS)

FILONOV, K.P.

Fall and winter migrations of the hawfinch. Kraeved.sbor.  
no.4:133-135 '59. (MIRA 13:7)  
(Bargusin Preserve--Grosbeaks)  
(Birds--Migration)

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413210004-6

TUKEV', V.S.; ELIONOV, K.P.; KAPLIN, V.M.

Berguzin State Preserve. Okhr. prir. Sib. i Dal'. Vost.  
no.1;187-192 '62. (MIRA 1785)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413210004-6"

SKRYABIN, N.G.; FILONOV, K.P.

Materials on the avifauna of the northeastern coast of Lake Baikal.  
Trudy BGZ no.4:119-189 '62. (MIRA 17:9)

FILONOV, K.P.

Fluctuation in the abundance of winter birds. Trudy BGZ no.4:  
191-202 '62.

Addition to the list of mammals in the Barguzin Preserve.  
Ibid.:228-229 (MIRA 17:9)

FILONOV, K.P.; KAPLIN, G.S.

Spawning of grayling in the preserve. Trudy BGZ no.4:230-232 '62.  
(MIRA 17:9)

FILONOV, K.P.

Seasonal development of nature in the Bashkir Preserve. Trudy  
Bash.gos.zap. no.2:13-43 '63.

Materials on winter bird populations in the Bashkir Preserve.  
Ibid.:127-143  
(MIRA 18:5)

Filimonov, F. P.

Quantitative characteristics of the summer ornithofauna of the  
Bashkir Reserve. Ornithologia no. 7:63-66 '65.

(MIRA 18:10)

1.2300 1573

27933

S/135/61/000/010/002/008  
A006/A101

AUTHORS: Kotov, B. I., Goncharenko, N. M., Filonov, K. S., Engineers

TITLE: Mechanization and automation of welding operations at the "Krasnyy Kotel'shchik" Plant

PERIODICAL: Svarochnoye proizvodstvo, no. 10, 1961, 14-17

TEXT: In order to fulfill the requirements of the current Seven Year Plan, the Plant mentioned above must achieve an increased production of boilers mainly through mechanization and automation of welding operations. The following main fields of welding operations and achievements brought about are enumerated:

1) Electric slag welding. This process is now being used for welding 24 mm thick metal; bi-layer metal; up to 90 mm thick austenite chrome-nickel shells; large size shells of 40 - 90 mm wall thickness, 3,100 mm in diameter, up to 2,100 mm length and 120 mm thick and 2,000 mm long panels. Welding is carried out with devices A-340 and A372M, austenite wire C<sub>8</sub>-1X18H95 (Sv1Kh18N9B) under TK3-HX (TKZ-NZh) flux. In comparison with multi-pass automatic welding the production cycle when using electric slag welding was reduced by 35-40%, labor consumption by 30%, power consumption by almost twice and flux consumption by a factor of 20.

Card 1/3

X

Mechanization and automation of welding ...

27933 S/135/61/000/010/002/008  
A006/A101

2) Automatic and semi-automatic submerged electric-arc welding. The Plant developed a number of automatic machines including a device with an automotive column and a portal type machine for the welding of containers. Automated welding was also applied for thin-walled large-size 1X18H9T (1Kh18N9T) steel containers of 3060 mm in diameter, 10,780 mm cylinder length, and 6 mm wall thickness. The operational temperature of the container wall was - 180°C. The welding of the cylindrical section was 50% automated, the panels were welded with tractor TC-32 (TS-32) which had been redesigned. A machine with a chain beveling tool and a carriage, moving together with the welding torch, is being used for the automatic welding of frame-beam structures of boilers; a rotary type machine with adjustable inclination of the face plate is employed for welding flanges to 200 - 1,600-mm sleeves and pipes. Satisfactory results were obtained with automatic building up with austenite steel of sealing surfaces of boiler fixtures and high-pressure steam preheaters. Several units with a rotating face plate were designed to fasten built-up parts of various sizes and weights.

3) Resistance butt welding of pipes. Resistance welding has been fully automated and the following butt welding machines are being used: MCM-150 (MSM-150), ACM-150 (ASM-150), ACM-300 (ASM-300), MCM-320 (MSM-320) and MCO-400 (MSO-400). At the recommendation of TsNIITMASH butt-welding of pipes by continuous flashing

Card 2/3

X

27933 S/135/61/000/010/002/008  
A006/A101

Mechanization and automation of welding ...

was developed and introduced. From 1957 butt welding of perlite steel pipes was assimilated, eliminating internal burrs by oxygen-air blast. Presently research is directed on butt welding of pipes with induction heating. 4) Flame cutting of metals is widely used. Manual and machine oxygen cutting is employed for cutting carbon low-alloy and two-layer steels and oxygen-flux cutting for cutting high-alloy steels. From 1957 the aforementioned operations have been carried out with the aid of natural gas. With the assistance of the Rostov NIITM, the Institute of Electric Welding imeni Ye. O. Paton, NIITVCh imeni V. P. Vologdin, TsNIITMASH, and the Taganrog Radio-Engineering Institute, the "Krasnyy Kotel'shchik" Plant is occupied with a series of investigations and projects including the weldability of new steel grades, the development of efficient electrodes and welding fluxes. In the honour of the XXII KPSS Congress the Plant undertook to design the first T-110 (TPP-110) boiler with 950 t/hour steam capacity. There are 7 figures and 1 Soviet-bloc reference.

Card 3/3

SOV/84-48-4-8/57

AUTHOR: Filonov, L.

TITLE: ~~When Lights Are Burning~~ (Kogda goryat ogni)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 5, pp 12-13 (USSR)

ABSTRACT: A story relating the activities of a night shift of maintenance teams in the Sverdlovsk airport. A photograph, showing an Il-12 aircraft before a night start, accompanies the text.

1. Aircraft--Maintenance    2. Personnel--Performance

Card 1/1

FILONOV, L.B.

Dependence of the selection time on the number of discriminative features.  
Vop. psikhol. 9 no.1:89-103 Ja-F '63. (MIRA 16:4)

1. Institut psikhologii Akademii pedagogicheskikh nauk RSFSR, Moskva.  
(Choice (Psychology))

MASLOV, Yuvenaliy Aleksandrovich; MIKHAYLOV, S.I., kand.tekhn.nauk,  
retsenzent; FILONOV, L.K., inzh., retsenzent; DENISOV, Yu.A.,  
inzh., red.; DUGINA, N.A., tekhn.red.

[Welding] Svarochnoe proizvodstvo. Moskva, Gos.nauchno-tekhn.  
izd-vo lit-ry, 1959. 328 p. (MIRA 12:11)  
(Welding)

FILONOV, M.

Industrial organization and planning. Mor.flot 16 no.9:15-16 8 '56.  
(MLRA 9:10)

1. Glavnyy inzhener Kanonerskogo zaveda.  
(Ships--Maintenance and repair)

ACCESSION NR: AP4042591

S/0056/64/046/006/2244/2245

AUTHORS: Perfilov, N. A.; Solov'yeva, Z. I.; Filov, R. A.

TITLE: Alpha particle spectrum of ternary spontaneous fission of Cm-244

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 6, 1964, 2244-2245

TOPIC TAGS: curium, alpha particle, fission product, energy distribution, alpha spectroscopy

ABSTRACT: The investigation was undertaken in order to check whether the spectral characteristic of the fission alpha particles is indeed independent of the mass number, as was observed by the authors earlier (Atomn. energ. v. 14, 575, 1963; ZhETF v. 44, 1832, 1963). The test was also aimed at checking the correctness of the value obtained for the most probable energy of the fission alpha particles for Cm<sup>242</sup>. The same experimental setup was used as in the earlier

Card

1/3

ACCESSION NR: AP4042591

investigation, and geometrical corrections were introduced into the experimentally observed energy distribution. The obtained energy spectrum for the ternary fission of Cm<sup>244</sup> was found to have a maximum near  $15.5 \pm 0.5$  MeV and, assuming a Gaussian distribution, a width  $11.5 \pm 0.5$  MeV at half height. The values obtained for Cm<sup>242</sup> are  $15.5 \pm$  and  $12 \pm 1$ , respectively, indicating that the spectral characteristics agree, within the experimental error, also for two curium isotopes, as they did agree before in the case of U and Pu. However, the shift in the most probable energy of ternary-fission alpha particles cannot be established on the basis of data on three elements only. "The authors thank A. S. Krivokhatskiy for assistance." Orig. art. has: 1 figure.

ASSOCIATION: None

SUBMITTED: 01Apr64

ENCL: 01

SUB CODE: NP

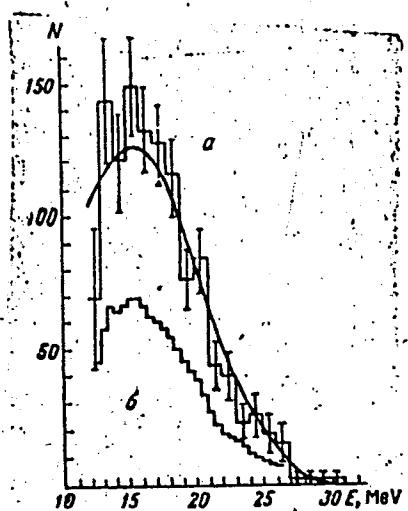
NR REF SOV: 004

OTHER: 003

Card # 2/3

ACCESSION NR: AP4042591

ENCLOSURE: 01



Alpha particle energy spectrum of ternary  
fission of  $\text{Cm}^{244}$   
a - experimental, b - following data reduction

Card 3/3

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413210004-6

F110MV, 1, J., 1, Other Major Range

Armed combat and ocean communication, Rec. phor. 48 no. 3:33-41 Mr  
165. (MIRA 18:8)

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413210004-6"

REF ID: A97002510

SEARCH CODE: UN/UL14/00/000/007/0035/0036

FILONOV, S. P. (Engineer); Titarenko, V. S. (Engineer); Zhaglov, Yu. A. (Engineer);  
Vorob'ev, I. P. (Candidate of technical sciences)  
"Results of Testing of 3700 Turbine Units with Free Piston Gas Generator"

Energo-Nashinostroychniy, No. 7, 1966, pp. 35-36.

Abstract: Results are presented from a testing of a gas turbine installation with a free piston gas generator produced by the Lugansk Locomotive Plant, designed for driving a centrifugal pump in an oil pipeline pumping station. The installation, the GTU 3700, demonstrated considerably higher efficiency and equivalent economic, starting and control characteristics when compared with open cycle turbine units now being produced. The gas temperature before the turbine did not exceed 490 degrees C. Economic calculations indicated that the unit would be efficiently usable in mainline oil pipeline installations.  
Org. art. has: 1 figure. [JPRS: 37,564]

ORG: none

TOPIC TAGS: gas turbine, pipeline

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 002

Card 1/1

UDC: 621.438.001.42

0925 0590

L 51375-65

ACCESSION NR: AP5010967

UR/0286/65/000/007/0152/0153

B  
P

AUTHORS: Ogarkov, A. G.; Malakhov, V. N.; Filonov, S. P.

TITLE: Double-piston hydraulic pump. Class 46, No. 169945

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 152-153

TOPIC TAGS: pump

ABSTRACT: This Author Certificate presents a double-piston hydraulic pump for driving gas supply units and injecting ignition fuel in internal combustion engines operating in the gas-diesel cycle. The pump contains a housing with a piston pair of differing diameter and rotating and return devices. To reduce the size of the pump, the smaller diameter piston is fixed and is placed concentrically in the larger diameter piston (see Fig. 1 on the Enclosure). To simplify driving gas supply units, the units are connected to the pressure chamber of the larger diameter piston. To reduce ignition fuel consumption and to insure optimal control of the operating process, the smaller diameter piston has a band rim. Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 24Feb64

NO REF Sov: 000

ENCL: 01

SUB CODE: IE

OTHER: 000

Card 1/2

I 51375-65

ACCESSION NR: AP5010967

ENCLOSURE: 01

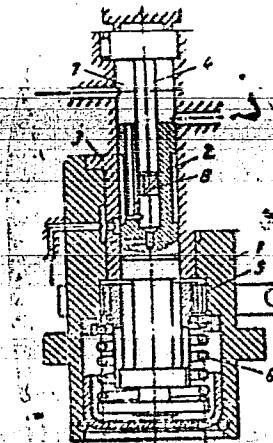


Fig. 1.

Double-piston hydraulic pump

1- housing; 2- larger diameter piston; 3- bushing of larger diameter piston;  
4- smaller diameter piston; 5- rotating device; 6- return device; 7- pressure  
chamber of larger diameter piston; 8- band rim

Card 2/2

L. 2001.5-66 EWT(d)/EWT(m)/EWP(f)/EFF(n)-2/EWF(v)/T/EWP(t)/EWP(k)/ETC(m)-6 JD/MM/HM.

ACC NR: AP6007624 (N) SOURCE CODE: UR/0229/66/000/001/0034/0040

AUTHOR: Filonov, S. P.; Gibalov, A. I. 49

ORG: Lugansk Diesel-Locomotive Plant of October Revolution (Luganskiy  
teplovozostroitel'nyy zavod imeni Oktyabr'skoy revolyutsii)

TITLE: Gas-turbine plant with free piston gasifiers for river ships

SOURCE: Sudostroyeniye, no. 1, 1966, 34-40

TOPIC TAGS: marine engineering, gas turbine engine

ABSTRACT: A description of a gas-turbine plant designed and manufactured by the Lugansk Diesel-Locomotive Plant is presented. The plant was designed for a 5300-ton river ship and consisted of two 925-hp turbine units (port and starboard) and three free piston gasifiers of OP-95 type. The plant specification is as follows:

Rated capacity	1850 hp
Rated one-hour capacity (forward)	2035 hp
Rated capacity (backward)	640 hp
Fuel consumption	195 g/hp-hr
Rated rpm (forward)	300 rpm
Rated rpm (backward)	180 rpm
Efficiency of the plant	32.6 %
Weight of the plant	36 ton
Unit weight of the plant	19.5 kg/hp

Card 1/3

UDC: 621.431.74:621.438

L 20945-66

ACC NR: AP6007624

The data on OP-95 gasifiers are given below:

Engine piston diameter	280 mm
Compressor piston diameter	750 mm
Piston stroke	375 mm
Compression rate (diesel cylinder)	11.5
Max. cycle pressure	120 ± 5 kg/sq cm
Average piston speed	8.2 m/sec
Rated capacity (adiabatic)	850 hp
Max. one-hour capacity (adiabatic)	935 hp
Gas pressure	4.5 atm
Gas discharge	2.3 kg/sec
Gas temperature	490 C
Number of cycles	735 cycles/min
Fuel consumption	152 g/hp-hr
Efficiency	41.5 %
Size	4000 x 1500 x 2300 mm
Weight	6000 kg
Unit weight	7.06 kg/hp

2/3

L 20915-66

ACC NR: AP6007624

O

The five-stage turbine unit has the following ratings:

Rated capacity (forward)	925 hp
Rated capacity (backward)	320 hp
Rated rpm (on the shaft, forward)	9000 hp
Efficiency	78.5 %
Weight of the unit	9000 kg
Size	4018 x 2550 x 2616 mm

The fuel of DT-1 trade mark was used. The lubricants were of UT GOST 32-53 type. The design and operation of turbines and gasifiers were discussed and their cross-sections were shown in two figures. Flow diagrams were used for describing the operations of fuel and gas distribution systems. The arrangement of the pneumatic system was explained and the variation of air pressure under various operating conditions was graphically represented. Orig. art. has: 7 figures.

SUB CODE: 13 / SUBM DATE: None / ORIG REF: 000 / OTH REF: 000  
21

Card 3/3 MQ 5

L 47373-66 EWP(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)	
ACC NR: AP6029066	SOURCE CODE: UR/0413/66/000/014/0122/0122
INVENTOR: Filonov, S. P.; Khakharev, L. M.; Gibalov, A. I.; Chugunov, V. K.; Maslov, G. I.	
ORG: none	
TITLE: Device for transferring gas of a free-piston generator. Class 46, No. 184065 Announced by Lugansk Order of Lenin Diesel Locomotive Building Plant im. October Revolution (Luganskiy ordena Lenina teplovozostroitel'nyy zavod) <span style="float: right;">43 B</span>	
SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 122	
TOPIC TAGS: free piston generator, gas generator, pipeline, pneumatic servomechanism, valve, piston engine	
ABSTRACT: The proposed device for the transfer of gas from a free piston generator (operating in a group of generators on a common gas pipeline) exhaust to the gas pipeline inlet contains atmospheric and main valves. In order to automate the gas transfer, the valves are equipped with pneumatic servo drives, interlocked with a slide valve, controlling the main valve by a servodrive, and rigidly connected with the servodrive of atmospheric valve which receives a command signal from a electro-pneumatic valve (see Fig. 1). In a modified version of the above-described device,	
Card 1/2	UDC: 621.432.9-129.31-577-

L 47373-66

ACC NR: AP6029066

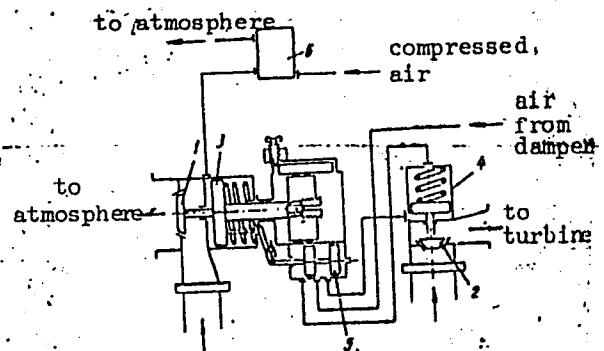


Fig. 1. Gas transfer device

1 - Atmospheric valve; 2 - main valve;  
3 - servodrive of the atmospheric valve;  
4 - servodrive of the main valve;  
5 - slide valve; 6 - electropneumatic valve.

the servodrive of atmospheric valve was equipped with a damper in order to ensure gradual charging of the generator during the transfer of gas. Orig. art. has:  
1 figure.

[AV]

SUB CODE:13,21,10 SUBM DATE: 15Mar65/

Card 2/2 mjs

FILONOV, V., inzhener.

Packaging flour in paper bags. Muk.-elev. prom. 23 no. 6:27 Je '57.  
(MIRA 10:9)

1. Chelyabinskoye oblastnoye upravleniye khleboproduktov.  
(Flour)

Filonov, V.

FILONOV, V.

Apparatus for automatic regulation of temperature in the hot air  
duct of the VTI-15 grain dryer. Muk.-elev.prom.23 no.8:27-28  
Ag '57. (MIRA 10:11)

1. Chelyabinskoye oblastnoye upravleniye khleboproduktov.  
(Grain--Drying)

FILONOV, V. A.

(DECEASED)

1963/2

c' 1963

MACHINE ENGINEERING  
steel rolling

see ILC

BOGOMOLOV, G.V.; FILONOV, V.A.

Hydrological cycles in the area of the Pripyat fault. Dokl. AN  
BSSR 8 no. 3:172-174 Mr '64. (MIRA 17:5)

1. Institut geologicheskikh nauk, Gosudarstvennogo geologicheskogo  
komiteta SSSR.

FILONOV, V.A.

AUTHORS: Finkel'shteyn, Ya. B., Filonov, V. A., Soyfer, V. N. 20-4-39/51  
Obukhova, M. P.

TITLE: An Attempt to Apply Tritium as an Indicator for Studying the  
Dynamics of Underground Waters (Optyt primeneniya tritiya v ka-  
chestve indikatora dlya izucheniya dinamiki podzemnykh vod)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 4, pp. 671-672 (USSR)

ABSTRACT: Such experiments were carried out by the institute (see associa-  
tion) with tritium water of a high specific activity by intro-  
duction into an underground brook in 1956. As water was here  
"marked" by water absorption processes were not possible. This  
allowed the determination of the right velocity of the water mo-  
vement. Small quantities of the tritium water (100-200 ml) with  
a specific activity of 10-20 mCo/ml were injected in the compres-  
sion borehole and tritium was determined at the output in the  
working boreholes. The taken samples were filtered for the purpo-  
se of cleaning, twice distilled with potassium permanganate and  
hydrogen obtained of the calcium oxide formed by it by means of zinc  
dust at 500°. The latter was mixed with ethylene and checked in  
the Geiger-Mueller counter. For the experiment 4 boreholes were cho-  
sen: 1 hole for pumping in, and 3 working or observation holes  
resp. The marked water appeared quicker than it was calculated in  
all 3 observation boreholes. The water was pumped into a producti-  
ve layer of the solid-cemented sandstones of the Chokrak horizon.

Card 1/2

An Attempt to Apply Tritium as an Indicator for Studying the 20-4-39/51  
Dynamics of Underground Waters.

Following conclusions can be drawn: 1) the application of tritium as water indicator is efficient and probably forms the only investigation medium for layer water movements. 2) Thus following problems can be solved: a) the connexions between the boreholes and layers can be determined. b) the field of the real velocity can be determined. c) determination of some physical properties of the collector d) water filtration in the engineer-hydrogeology 3) the application of tritium is especially of value for its relative harmlessness in consequence of a soft  $\beta$ -radiation and a constant dilution under natural conditions. 4) the introduction of tritium water into the borehole can be carried out simultaneously with other investigations since the soft  $\beta$ -radiation does not influence the apparatus of the radioactive carottage. 5) For this purpose the working boreholes need not be stopped.

There are 1 figure and 1 reference.

ASSOCIATION: Institute for Petroleum AN USSR (Institut nefti Akademii nauk SSSR)  
PRESENTED: May 11, 1957, by S. I. Mironov, Academician  
SUBMITTED: May 7, 1957  
AVAILABLE: Library of Congress  
Card 2/2

Filonov, V. A.

132-1-5/15

AUTHORS: Finkel'shteyn, Ya.B., Filonov, V.A., Soyfer, V.N., Obukhova, M.P.

TITLE: Experimentation with Radioactive Hydrogen-Tritium Isotopes as Tracers  
in the Study of Dynamics of Ground Water  
(Ob opyte primeneniya radioaktivnogo izotopa vodoroda-tritiya  
v kachestve indikatora dlya izucheniya dinamiki podzemnykh  
vod)

PERIODICAL: Razvedka i Okhrana Nedr, 1958, # 1, pp 28-35 (USSR)

ABSTRACT: The movement of subterranean water can be determined by using tritium, which has proved an ideal tracer under varying conditions, and is both inexpensive and safe to use. The method of "Marking" subterranean water is of special interest for the crude oil industry. When injecting water into oil-bearing strata, it is important to know the flow of water within the layer to rationally exploit the deposit.

Beginning in 1955, in the Laboratory No. 1 of the Petroleum Institute of the USSR Academy of Sciences, the authors of this article under the supervision of G.N. Flerov, F.A. Alekseyev and G.P. Gol'bek, conducted experiments with radioactive tracers. Super heavy water (where hydrogen is represented by its tritium modification) was chosen as the active agent.

Card 1/3

132-1-5/15

Experimentation with Radioactive Hydrogen-Tritium Isotopes as Tracers  
in the Study of Dynamics of Ground Water

Concentrations of tritium in the "marked" water occurring below the petroleum layer did not exceed the permissible dose, which was set at 0.05 millicurie / milliliter in the water, and  $5 \cdot 10^{-2}$  in the atmosphere. Different methods of marking water by means of tritium were examined by the authors, mainly by using gaseous samples (acetylene, hydrogen, vapor of water), which give clear indications with the Geiger-Mueller recorder. The method of measuring tritium in prepared samples consisted of three operations: electrolytic concentration, decomposition of water, and measuring the gaseous samples of hydrogen inside the sensitive Geiger-Mueller device.

The first experiment with tritium tracers in subterranean layers was conducted during the summer 1956 at the second Oktyabr' deposit. Injection of tritium into the injection wells was done by means of super heavy water placed in flasks. The active water which was injected into the layer XV had an average activity of 3 curie. Tests were taken every two hours during a period of 24 hours.

Card 2/3

132-1-5/15

Experimentation with Radioactive Hydrogen-Tritium Isotopes as Tracers in the Study of Dynamics of Ground Water

A wide range of hydrogeological and hydrotechnical problems can be solved with the aid of tritium. At present, a serious handicap is the bulkiness of equipment. However, measuring methods as well as apparatus can be simplified.

There are 2 photographs and 3 figures.

ASSOCIATION: Petroleum Institute of the USSR Academy of Sciences (Institut nefti AN SSSR)

AVAILABLE: Library of Congress  
Card 3/3

ALEKSEYEV, P.A.; SOYFER, V.N.; FILONOV, V.A.; FINKEL'SHTEYN, Ya.B.

Using tritium, the isotope of hydrogen, in oil field development. Geol.  
nefti 2 no.12:47-52 D '58. (MIRA 12:2)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSR.  
(Hydrogen--Isotopes) (Oil field flooding)

FILONOV V. A.

89-3-16/30

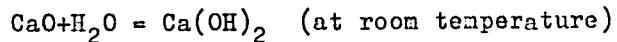
AUTHORS: Alekseyev, F. A. , Soyfer, V. N. , Filonov, V. A.  
Finkel'shteyn, Ya. B.

TITLE: Experimental Application of Tritium as a Detector of Oily  
Water (Opyt ispol'zovaniya tritiya kak indikatora plastovykh  
vod)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 3, pp. 298 - 301 (USSR)

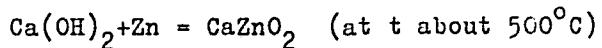
ABSTRACT: 3 ampules of 1 C tritium each were introduced successively  
into the water of the borehole. Two hours later the oily  
water to be investigated was taken out. At first this water  
was twice distilled in order to separate the possibly exist-  
ing natural radioactive salts and additions of oil. 10 - 16  
ml of this water were reduced to from 0,4 to 0,6 ml in a se-  
parately described electrolyzing apparatus. The electrolysis  
brings about a tritium concentration 7 - 10 times as strong.  
By the two following reactions H was separated from the  
samples concentrated by tritium:

Card 1/2



89-3-16/30

## Experimental Application of Tritium as a Detector of Oily Water



The gas samples thus obtained were filled into a counting tube of 0,5 l (pressure 100 - 200 mm), into which ethylene is added, at 10 - 15 mm mercury column partial pressure. The operational voltage of this counting tube is at 1500 - 1800 V and the plateau at 100 - 150 V with 3 % slope. After an especially careful screening tritium could be proved. Altogether in a concrete case 400 samples from 8 boreholes could be checked. From these measurements the velocity at which the water marked by tritium distributes under the earth could be computed. There are 4 figures, 3 references, 0 of which are Slavic.

SUBMITTED: July 30, 1957

AVAILABLE: Library of Congress

1. Water-Oil detection 2. Tritium-Applications

Card 2/2

21(8)

SOV/7-58-7-4/13

AUTHORS:

Alekseyev, F. A., Yermakov, V. I., Filonov, V. A.

TITLE:

Concerning the Content of Radioactive Elements Found in Waters  
of Oil Field Deposits (K voprosu o soderzhanii radioelementov  
v vodakh neftyanykh mestorozhdeniy)

PERIODICAL:

Geokhimiya, 1958, Nr 7, pp 642-649 (USSR)

ABSTRACT:

The content of radium and uranium found in waters of oil field deposits was examined: radium was determined radio-chemically (Ref 3); the content of radon was measured by means of the electrometer G-12, the amount of uranium ascertained by luminescence. The research was conducted at the Laboratoriya yadernoy geofiziki i geologii Instituta nefti AN SSSR (Laboratory for Nuclear Geophysics of the Petroleum Institute AS USSR). Waters from wells as well as surface water from oil fields of West Turkmenia (Tables 1-3) were examined. Samples were taken from the petrol and mineral gas province of Emba (Kazakhstan) (Tables 4,5) and from oil fields in the Cis-Uralian region (Tables 6-8). Independent of the type of deposit, the radium content ranges from  $10^{-10}$  g/l, seldom under  $10^{-11}$  g/l. The uranium content seldom surmounts  $1.0 \cdot 10^{-7}$  g/l.

Card 1/2

SOV/7-58-7-4/3

Concerning the Content of Radioactive Elements Found in Waters of Oil Field Deposits

The largest quantities of radium are to be found in waters of the calcium chloride type. Uranium is concentrated in waters of the sodium bicarbonate type. Radium is found in largest amounts in the marginal zones of the oil field deposits. There are 8 tables and 12 references, 11 of which are Soviet.

ASSOCIATION: Institut nefti AN SSSR, Moskva (Petroleum Institute of the Academy of Sciences, USSR, Moscow)

SUBMITTED: July 7, 1958

Card 2/2

## PAGE 1 BOOK EXPLANATION

807/500

**Yedernaya gorizontal'noj atomnik stazy po izotopovym radiotsentratorom sluchayno**  
**I. Lantsegor v. gosudarstv. nauch. (nuclear corporate) Collection of Articles on**  
**the Use of Induced Radioactivity and Isotopes in Petroleum Geology** Moscow,  
 Gostoptekhnizdat, 1959. 370 p. Errata s. 19 inserted. 1,000 copies printed.

**Ed.:** F.A. Al'tshuler, Professor, Doctor of Geological and Mineralogical Sciences;  
**Rev. Ed.:** A.P. Kolanski, Tech. Ed.; M.S. Polozina.

**PURPOSE:** This book is intended for petroleum geologists, geophysicists and scientists interested in geological research who are interested in radiometric techniques of petroleum prospecting.

**CONTENTS:** The collection contains 28 articles compiled by staff members and experts of the Institute for Nuclear Geology and Geochemistry of the Petroleum Institute (now the Institute for Geology and Mineral Processing) of the Academy of Sciences USSR, the Laboratory for Radiometric Logging of the All-Union Scientific Research Institute for Petroleum Enterprises, the heads of scientific planning research projects for petroleum enterprises. The articles treat new material on radiometric surveys in petroleum geology; describe radiometric instruments (counters, etc.) for radioactive tritium and gamma rays; give the results of research with models of rock strata, including nuclear materials or a new method for effectively utilizing radioactivity in the analysis of rock samples from petroleum-survey bore holes, etc. Problems in bore methods in the study and interpretation of radiometric measurements in bore holes are reviewed, as well as the results of studies in the nomenclature of criteria in tracing the movement of petroleum and water in a stratum. Finally, a new method of surveying based on measuring the radioactivity of the surface of a prospective petroleum deposit is described. No personnel ties are mentioned. References accompany each article.

**Al'tshuler, F.M. Mapping Petroleum-Water Surfaces of Contact in Asymmetric Oil Fields by the Method of Induced Radioactivity of Sodium** 100

**Bartovskiy, Yu. A. Possibility of the Method of Induced Radioactivity for Quantitative Evaluation of the Petroleum Capacity and Other Characteristics of Strata** 105

**Blankens, P.J. The Effectiveness of the Methods of Induced Radioactivity of Sodium and Chlorine to Compute the Oil- and Water-Surrounding Capacity of Porous Reservoirs** 110

**Burkov, D.M., O.I. Darveg, F.P. Denisov, B.P. Ovtcharov, and V.O. Sretenskiy. Utilization of Epithermal Neutrons in the Neutron-Scintillation Method (NSM) of Evaluating the Porosity of Sand and Carbonate Collections** 122

**Klimov, F.A., S.A. Denisov, E.V. Miller, and V.P. Ovtcharov. The Use of Gamma-Ray Spectroscopy to Investigate Bore Holes** 128

**Dobrovolskiy, Sh. A. Gamma-Ray Spectroscopy of Natural and Artificial Radon-222 Concentrations Under Bore Hole Conditions** 136

**Ostrikov, V.P., S.A. Denisov, and Yu. S. Smirnovich. Determination of the Point of Water-Petroleum Contact From Data Obtained Using the Neutron-Scintillation Method With Scintillation Counters (NSM-12) and the Neutron-Scintillation Method Based on Thermal Neutrons (NSM-7)** 144

**Rabchenko, Yu. A. Separation of the Radiation of Different Elements During the Irradiation of Petroleum-Surveys Bore Holes by the Method of Induced Radioactivity of Sodium and Chlorine** 170

**Dorzhin, T.L. and N.A. Peresvet. The Use of Scintillation Counters to Detect Slow Neutrons in Petroleum Survey Bore Holes** 177

**Zolotarev, A.V. Distribution of Slow Neutrons in a Heterogeneous Medium** 195

**Gulya, Ju.A. Influence of the Conditions of Measuring Upon Predicting the Porosity of Rock According to Data Obtained by the Neutron-Scintillation Method** 201

**Baldin, O.Y. Development of New Types of Radiometric Apparatus for Use in Petroleum Survey Operations** 222

**Polozina, M.S. The Problem of Determining the Point of Water-Petroleum Contact Under Conditions of Cased Wells in Carbonate Deposits** 228

**Lepunskaya, D.V., and Z. Ye. Ousler. Analysis of Rock Based on Neutron-Induced Activity** 238

**Al'tshuler, F.A., V.I. Yermakov, and K.A. Filimonova. The Problem of Radium and Uranium Content in Oil-Field Waters** 252

**Vaynshteyn, V.I., A.I. Lebedevitch, N.G. Orenstein, Yu. A. Romanov, and L.N. Rybnikov. Results of Investigation of Various Gases Found in Oil-Field Regions, Using Aerial and Ground Radiometric Survey Methods** 264

FILONOV, V.A.

Geochemical characteristics of underground waters in the  
Khanka Lowland. Sov.geol. 2 no.9:105-111 S '59.  
(MIRA 13:2)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.  
(Khanka Lowland--Water, Underground)

FILONOV, V.A.

Hydrochemical characteristics of the Suyfun-Khankay Depression.  
Trudy Inst. geol. i razrab. gor. iskop. 1:341-362 '60.  
(MIRA 14:1)  
(Suyfun-Khankay Depression--Water, Underground)

GAMERSHTEYN, V.A., inzh.; LITVINENKO, V.G., inzh.; Prinimali uchastiye:  
FILONOV, V.A., inzh.; KSENDZUK, F.A., inzh.; SAMOYLOV, I.D.,  
inzh.; VERBITSKIY, A.I., inzh.; YASHNIKOV, D.I., inzh.;  
LEYCHENKO, M.A., kand. tekhn. nauk; CHAMIN, I.K., tekhnik;  
TOKAR', P.K., inzh.; ZAYTSEV, P.P., inzh.

Mastering the production of cold-rolled sheets. Met. i gornorud.  
prom. no.6:72-74 N-D '62. (MIRA 17:8)

1. Zavod "Zaporozhstal'" (for Gamershteyn, Litvinenko, Filonov,  
Ksendszuk, Samoylov, Verbitskiy, Yashnikov). 2. Tsentral'nyy  
nauchno-issledovatel'skiy institut chernoy metallurgii im.  
Bardina (for Leychenko, Chamin, Tokar', Zaytsev).

FILONOV, V.A.

Effect of the organic matter on the shift of radioactive equilibrium in the waters of oil fields. Sov. geol. 7 no.6:144-146  
Je '64 (MIRA 16:1)

1. Institut geologicheskikh nauk AN BSSR.

FIL'ONOVA, V.A.; BAKSHTAYEVA, I.A.

Distribution of radioactive elements in the formation waters  
of the Pripyat fault. Dokl. AN BSSR 8 no.2:120-123 F '64.

(MIRA 17:8)

I. Institut geologicheskikh nauk Gosudarstvennogo geologicheskogo komiteta SSSR. Predstavлено akademikom AN BSSR G.V. Bogomolovym.

FILONOV, V.A.; LONDINSKAYA, K.I.

Content of phenols in natural waters. Dokl. AN BSSR 8 no.10:664-666  
0 '64. (MIRA 18:3)

1. Institut geologicheskikh nauk Gosudarstvennogo geologicheskogo  
komiteta SSSR.

FILONOV, V.A.

Uranium in oils of the Dnieper-Donets Lowland and Pripyat trough.  
Dokl. AN SSSR 159 no.2:355-356 N '64. (MIRA 17:12)

1. Institut geologicheskikh nauk AN BSSR. Predstavлено академиком  
N.M. Strakhovym.

FILONOV, Viktor Arturovich

Some features of the flight operation of jet transport planes.  
Grazhd. av. 12 no. 7:19-22 Jl '55. (MIRA 11:6)

1. Komandir reaktivnogo transportnogo samoleta.  
(Jet transports)

Filonov, V. A.

AUTHOR: Filonov, V., Pilot, 1st Class

84-12-27/49

TITLE: Winter Flying the Tu-104 (Polety na Tu-104 v zimnikh usloviyakh)

PERIODICAL: Grazhdanskaya aviatsiya, 1957, Nr 12, pp 15-17 (USSR)

ABSTRACT: The author, one of the foremost jet airliner pilots reports on his experiences in winter flying. The first and basic condition for uninterrupted service is freedom of runways from snow or ice under any circumstances. A separate runway for jet aircraft is suggested, so that there will be enough time between landings to do the clearing work. He refers to difficult working conditions of maintenance men in intermediate airports when the weather is cold, but insists nevertheless on the quality of work. The author objects to the method of removing ice crust from the airframe by washing it away with hot water, which can get into the engine compressors. He also requests that the weather service report the type of clouds, their lower and upper limits, the probability of icing, air temperatures up to 10 -11 km at the airport of departure as well as within a radius of 250-300 km along the route and the weather conditions at the destination for the time of landing. The utilization of information from airliners in flight is urged, to

Card 1/2

Winter Flying the Tu-104

84-12-27/49

insure a correct forecast for at least 3-4 hours. The distribution of bulletins should be extended to the airfield and the maintenance services. Further, the utilization of radio and radio-navigational facilities is considered a vital factor in achieving regularity and safety. Their use is recommended under all circumstances for the purpose of training. The traffic control agencies are criticized for their inability to cope adequately with the high-speed, heavy jet aircraft. The author also discusses errors made by other pilots in handling the Tu-104 under various circumstances. Finally, the use of the de-icing system is discussed, the main requirement being that it be switched on before ice forms.

AVAILABLE: Library of Congress

Card 2/2

SOV/84-58-10-10/54

AUTHOR: Filonov, V. A.

TITLE: Important Tasks (Vazhnyye zadachi)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 10, p 7 (USSR)

ABSTRACT: The author states that the volume of traffic on the Tu-104, opened in 1958, is steadily growing in his unit. Air routes now connect Moscow with Tirana, Copenhagen, Brussels, Amsterdam, Paris, Delhi, and Cairo. Dozens of crews were added to the service in the past two years. In the past few days regular runs started on the three and a half thousand km Moscow - Alma-Ata route. There is one photograph of the Tu-104 plane.

Card 1/1

FILONOV, V.M.

Simplest type of explosives. Put' i put.khoz. 4 no.9:39 S '60.  
(MIRA 13:9)

1. Nachal'nik otdela burovzryvnykh rabot tresta Mostostremtunnel'.  
(Explosives)

FILONOV, V.M.

Use of microcharges for blasting in quarries. Put' i put.  
khoz. 8 no.7:26 '64. (MIRA 17:10)

1. Nachal'nik ot dela Gosudarstvennogo instituta po geologicheskim  
izyskaniyam i proyektirovaniyu shchebenochnykh zavodov i kar'yerov  
Gosudarstvennogo proizvodstvennogo komiteta po transportnomu  
stroitel'stvu SSSR.

AUTHOR:

Filonov, V. S.

48-1-20/20

TITLE:

Industrial Specimens of Detectors for Thermal and Fast Neutrons  
(Promyshlennyye obraztsy detektorov teplovых и быстрых  
нейтронов).

PERIODICAL:

Izvestiya AN SSSR Seriya Fizicheskaya, 1958, Vol. 22, Nr 1,  
pp. 94-96 (USSR).

Received: March 8, 1958

ABSTRACT:

The detectors described here were produced for industry-samples of dosimeters of thermal and fast neutrons of the type PH-3 and PH-4. The best detector for fast neutrons is the detector described in publications under the name of "Tabletka Gornjaka" (reference 1). It possesses a sufficiently high recording-efficacy of fast neutrons in the energy range of 0,5 - 14 MeV on a  $\gamma$ -background to  $250 \text{ Mr sec}^{-1}$ . According to reference 1 this efficacy amounts to  $\sim 1\%$  for the energy of 4 MeV. The efficiency changes at various neutron-energies in such a manner that, to a certain degree, it reproduces the course of the dose-curve. The impulses produced under the influence of  $\gamma$ -radiation are according to amplitude, smaller by one order of magnitude than the impulses of the neutrons.

Card 1/3

Industrial Specimens of Detectors for Thermal and Fast Neutrons. 48-1-20/20

This makes it possible to realize a reliable discrimination of the  $\gamma$ -background. The efficacy of the recording of neutrons correspondingly also decreases. The detector has no directivity: a modification of the angle of incidence of neutrons changes the efficacy of recording ( $\pm 5\%$ ). The temperature-testing of this detector with the photoelectron-multiplier  $\Phi\beta Y-19$  showed that with a rise of temperature by  $1^\circ$  in the temperature range of  $10 - 60^\circ$  counting decreases by 0,6%. In this connection the amplitude of the radiation-impulses decreases, whereas the noise-amplitude increases. The investigations showed that every resistance of the divisor may in the photoelectron-multiplier  $\Phi\beta Y-19$  not be taken larger than 5 megaohm. An increase in the resistance in large  $\gamma$ -fields ( $\sim 250 \mu r sec^{-1}$ ) leads to a strong redistribution of the potentials at the last dynodes. But this makes special demands on the power of the feed source of the photomultiplier. The use of a divisor with a resistance of 5 megaohm in connection with a voltage that guarantees the maximum ratio signal/noise restricts the error to  $\pm 3\%$ . The scattering of the efficacy of the detector does not exceed  $\pm 10\%$ . The thermal neutron detector differs from the above-described one by the presence

Card 2/3

Industrial Specimens of Detectors for Thermal and Fast Neutrons. 40-1-20/20

of boron anhydride in the former. In the first case the heavy ionizing particle is produced due to an inelastic collision, in the second case due to an inelastic one. Therefore the detectors are very similar according to their parameters and can be exchanged in devices without additional adjustment. The deficiency in the detector for thermal neutrons is the counting of fast neutrons. But in measurements of the maximum permissible flow of thermal neutrons on the background of a maximum permissible flow the counting of the fast neutrons amounts to less than 1%. There are 6 figures, 1 table, and 1 reference, 1 of which is Slavic.

AVAILABLE: Library of Congress  
1. Neutron counters 2. Radiation counters 3. Dosimeters

Card 3/3

S/578/61/000/002/002/002  
E032/E514

9,6150

AUTHORS: Filonov, V.S. and Sel'dyakov, Yu.P.  
TITLE: A detector for intermediate-energy neutrons  
PERIODICAL: Zhernov, V.S. and Shirshov, D.P., eds. Uzly novoy  
apparatury dlya issledovaniya yadernykh izlucheniye;  
nauchno-tehnicheskiy sbornik. no.2. Moscow,  
Gosatomizdat, 1961, pp.107-110

TEXT: The authors have used a perspex phosphor (3.7 cm  
thick, 8 cm in diameter, mounted on a ФЭУ-24 (FEU-24) photo-  
multiplier). The phosphor contained 5 g of a substance referred  
to as T-1 per 240 g of perspex. The T-1 is said to have been  
developed by T. V. Timofeyeva and S. P. Khormushko (Ref.1: Izv.  
AN SSSR, seriya fiz., 22, No.1, 14-20, 1958; Ref.2: Atomnaya  
energiya, 3, No.3, 1958) and is being manufactured by the "Red  
Chemist" factory. Fig.1 shows the efficiency of the detector  
as a function of the neutron energy (eV). It was found that by  
discriminating against a  $\gamma$ -ray background of 1000  $\mu$ r/sec ( $^{60}\text{Co}$   
 $\gamma$ -rays) the efficiency was reduced by a factor of 4-5. A change  
in the energy of the  $\gamma$ -rays did not have a great effect on the

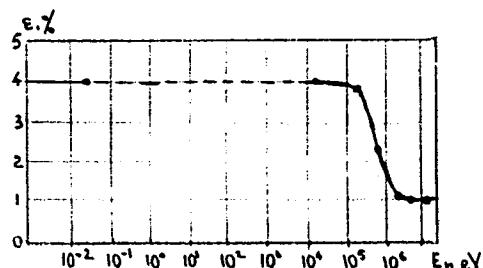
Card 1/2

A detector for intermediate ...

S/578/61/000/002/002  
EO32/E51<sup>4</sup>

neutron counting rate. Fig.3 shows the neutron efficiency as a function of the energy of the  $\gamma$ -rays which were discriminated against. Acknowledgments are expressed to I. V. Timofeyeva for advice on the phosphor, S. N. Baykalov, M. V. Blinov.

A.I. Seryakov and A. S. Solov'yev for carrying out some of the measurements, V. V. Matveyev and M. N. Pchel'nikov for assistance in this work and to N. N. Prikhodchenko for developing the detectors. There are 3 figures and 4 Soviet references.



Card 2/2

Fig.1

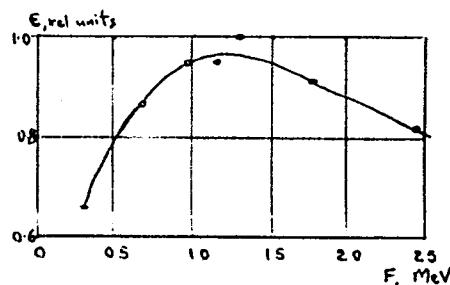


Fig.3

✓ C

PHASE I BOOK EXPLOITATION

SOV/6058

Polikarpov, V. I., V. S. Filonov, O. V. Chubakova, and N. N. Yuzvuk.

Kontrol' germetichnosti teplovyyayushchikh elementov (Monitoring the Hermiticity of Fuel Elements). Moscow, Gosatomizdat, 1962. 186 p.  
Errata slip inserted. 2500 copies printed.

Ed.: Ye. I. Panasenkova; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for engineers and technicians specializing in the design and operation of reactors and of systems for monitoring the hermeticity of fuel-element jackets.

COVERAGE: The principles of designing systems for monitoring the hermeticity of fuel-element jackets are presented. Particular attention is given to the physical and chemical phenomena affecting system sensitivity and efficiency.

Card 1/ 2

## Monitoring the Hermeticity (Cont.)

SOV/6058

The existing or projected non-Soviet systems are surveyed. Formulas and tabulated reference data for the designer's use are included. There are 135 references: 90 Soviet (including 25 translations), 42 English, 2 French, and 1 German.

## TABLE OF CONTENTS [Abridged]:

Introduction	3
Ch. I. Destructive Processes in Fuel Elements	5
1. Fuel elements	5
2. Causes of hermeticity failure in fuel-element jackets	6
3. Development of defects in fuel-element jackets	10
4. Estimating the release of fission-fragment products from a damaged fuel element	12
5. Concentration of fission-fragment products in the coolant	25
6. Determining the sensitivity of systems for monitoring the hermeticity of jackets	28

Card 2/4 2

22(1)

SOV/47-59-3-22/53

AUTHOR: Filonov V.V.

TITLE: Model of an Artificial Earth Satellite

PERIODICAL: Fizika v shkole, 1959, Nr 3, p 74 (USSR)

ABSTRACT: The author describes a model intended to be used in school for illustrating an artificial satellite orbit. The model consists of a globe with vertical axle and a device which marks a satellite orbit with chalk. When the model is operated, the graph marked by the device represents the function of the rotary motion of the earth and the revolutions of the satellite. There is 1 diagram.

ASSOCIATION: Malopereshchepinskaya srednyaya shkola, Poltavskaya Oblast' (Maleyu Pereshchopina Secondary School, Poltava Oblast')

Card 1/1

L 1260-66

ACCESSION NR: AP5024392

UR/0286/65/000/015/0073/0073  
615.372.002.2

B

AUTHOR: Arkhipov, V. V.; Filonov, Yu. A.; Nekhayeva, L. A.; Khrushchev, V. G.; Perminov, T. A.; Shevyrev, N. S.; Zolozov, I. S.; Belyayev, A. S.; Nozdrachev, A. I.; Yevglevskiy, A. A.

TITLE: A method for manufacturing tuberculin. Class 30, No. 173381

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 73

TOPIC TAGS: tuberculosis, immunology, allergen

ABSTRACT: This Author's Certificate introduces a method for manufacturing tuberculin. The method consists of growing a tubercular culture on a nutrient medium, removal of the bacterial matter and filtration. An active and specific allergen is produced and labor-consuming operations are reduced by exposing the culture to Co<sup>60</sup>  $\gamma$ -radiation.

ASSOCIATION: none

SUBMITTED: 11Jun64

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

Card 1/1

KROSS, A.[Cross, A.D.]; PENTIN, Yu.A., kand. khim. nauk [translator];  
FILONOVA, A.D., red.; KHOMYAKOV, A.D., tekhn. red.

[Introduction to practical infrared spectroscopy] Vvedenie v  
prakticheskuiu infrakrasnuiu spektroskopiiu. Moskva, Izd-vo  
inostr. lit-ry, 1961. 109 p. (MIRA 15:1)  
(Spectrum, Infrared)

11.1320  
11.1230

REPROD:

24020  
S/076/61/035/005/005/008  
B101/B216

Skerokhodov, I. I., Nekrasov, L. I., Kobozev, N. I., and  
Filonenko, A. D. (Moscow)

TITLE: Study of the formation of hydrazine during dissociation of ammonia in an electric glow discharge

PUBLICATION: Zhurnal fizicheskoy khimii, v. 55, no. 5, 1961, 1026-1030

TEXT: The industrial synthesis of hydrazine according to Raschig is too expensive because the dilute solutions obtained must be concentrated. Therefore, the production of hydrazine by electric discharge was studied. The authors present a survey of results obtained by western scientists and the reaction equations proposed by them, and report on their own experiments intended to clarify the mechanism of hydrazine formation. For this purpose, they used the apparatus described in Ref. 1\* (Zh. fiz. khimii, 31, 1843, 1961), which was used by the authors of that paper to study the water vapor dissociated by electric discharge.  $N_2$  entered a U-shaped discharge tube and was collected in a vessel cooled by liquid nitrogen. The

Card 1/6

24020

S/076/61/034/005/003/008

P101/B218

Study of the formation of hydrazine during...

electrodes were made of stainless steel. The pressure of  $\text{NH}_3$ , which varied between 5-10 mm Hg, was measured by a diaphragm gauge. The flow of  $\text{NH}_3$  varied between 0.9 and 3.1 liter (pressure 1 atm). The discharge current was 0.03-0.15 A, which corresponded to a power of 0.17-0.54. The hydrazine formed was determined photometrically by means of p-dimethyl anilinebenzaldehyde. The fraction of  $\text{NH}_2$  which did not react was collected in  $\text{H}_2\text{SO}_4$  and determined by titration of the excess acid. The authors found that the yield of  $\text{N}_2\text{H}_4$  attains a maximum at 5.3 mm Hg, regardless of the discharge intensity. In order to establish a law on the basis of the experimental data, the authors took  $u/v$  as a parameter ( $u$  is proportional to the discharge, va;  $v$  denotes the rate of flow of the gas, l/hr;  $p$  is the gas pressure at the input of the discharge tube, mm Hg). Fig. 1 shows the degree of dissociation of  $\text{NH}_3$  as a function of  $u/v$ ; Fig. 2 shows the relative yield of  $\text{N}_2\text{H}_4$  (expressed in % of dissociated  $\text{NH}_3$ ) as a function of  $u/v$ . The maximum yield was 4% referred to dissociated  $\text{NH}_3$ , and 0.9%

Card 2/6

24020  
S/076/61/035/005/C03/008  
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Study of the formation of hydrazine during...

referred to the total amount of  $\text{NH}_3$  passed through the apparatus. Experiments at -80 and -196°C showed that the yield of  $\text{N}_2\text{H}_4$  does not depend on temperature. It is concluded that the formation of hydrazine proceeds according to the equation  $\text{NH}_2 + \text{NH}_2 + \text{M} \rightarrow \text{N}_2\text{H}_4 + \text{M}$  (5), where M is a particle causing recombination. Dissociation of  $\text{N}_2\text{H}_4$  proceeds according to the equations  $\text{N}_2\text{H}_4 \rightarrow \text{N}_2\text{H}_4^* \rightarrow 2\text{NH}_2$  (6) and  $\text{N}_2\text{H}_4 + \text{H} \rightarrow \text{NH}_2 + \text{NH}_3$  (7). Thus, the yield of  $\text{N}_2\text{H}_4$  depends on several factors which act together: 1) on the concentration of  $\text{NH}_2$  radicals, which is inversely proportional to the dissociation of  $\text{NH}_3$ ; 2) on the concentration of atomic hydrogen, which is directly proportional to the dissociation of  $\text{NH}_3$ ; 3) on the time for which the gas remains in the discharge tube. The shorter this period, the less is the dissociation of  $\text{N}_2\text{H}_4$ . A maximum degree of  $\text{NH}_3$  dissociation corresponds to a minimum concentration of  $\text{NH}_2$  radicals and to a maximum concentration of atomic hydrogen. Thus, the yield of hydrazine reaches a

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Study of the formation of hydrazine during...

minimum with maximum dissociation of  $\text{NH}_3$ . S. S. Vasil'yev and Ye. N. Yeremin are mentioned. There are 2 figures and 14 references: 3 Soviet-bloc and 11 non-Soviet-bloc. The 3 most important references to English-language publications read as follows: J. C. Devins, B. Milton, J. Amer. Chem. Soc., 76, 2618, 1954; G. W. Robinson, M. J. McCarty, J. Chem. Phys., 30, 999, 1959; K. Ouchi, J. Electrochem. Soc. Japan, 20, 381, 1952.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova  
(Moscow State University imeni M. V. Lomonosov)

SUBMITTED: July 3, 1959

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MAYRANOVSKIY, S.G.; FILONOV, A.P.

Kinetic surface waves of 5-Bromo-2-acetylthiophene in water-methanol  
solutions. Elektrokhimiia 1 no.9:1044-1051 S '65. (MIRA 18:10)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR  
1 Institut elektrokhimii AN SSSR.

FILONOVA, L.

Shorter working day. Neftianik 5 no.3:1-2 Mr '60. (MIRA 14:9)

1. Nachal'nik ORKTIZA Upravleniya naftedobvyayushchey i gazovoy  
promyshlennosti Checheno-Ingushskoy ASSR.  
(Hours of labor) (Wages)

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PHASE I BOOK EXPLOITATION

SOV/1265

Kamyshhev, Sevast'yan Filippovich, Galikhin, Viktor Dmitriyevich, Larin  
Vasiliy Il'ich, Mikhaylov, Leonid Leonidovich, Filonova, Lidiya Ivanovna,  
Yasnits, Mikhail Grigor'yevich, and Kvochkin, Fedor Abramovich

Groznenskaya neftyanaya promyshlennost' (The Grozny Petroleum Industry) Moscow,  
Gostoptekhizdat, 1957. 57 p. 1,500 copies printed.

Executive Ed.: Lozbyakova, Ye. S.; Tech. Ed.: Polosina, A.S.

PURPOSE: The book is intended for engineers, technicians and workers in the  
petroleum industry.

COVERAGE: The status of the Grozny petroleum industry before the Revolution and  
the achievements in the recovery and refining of petroleum during the 40 years  
after the Revolution are discussed. New oil fields, petroleum installations  
and modern techniques and procedures introduced in the Grozny petroleum industry  
are described. No facilities are mentioned. No references are given.

Card 1/3

11(0)

SOV/1265

**The Groznyy Petroleum Industry****TABLE OF CONTENTS:**

	Page
Ch. I. Development of the Groznyy Petroleum Industry from the Time of Its Nationalization up to the Time of the Implementation of the Sixth Five Year Plan	3
Groznyy petroleum industry before its nationalization	3
Groznyy petroleum industry during the first years after its nationalization	3
The first five-year plans	8
The Great Patriotic War and the period of reconstruction of the national economy	11
The post-war period	14
Ch. III. Present Status and Prospects of Development of the Groznyy Petroleum Industry	19
Ch. IIII. Development of Geological Prospecting in the Groznyy Petroleum Industry	25

Card 2/3

SOV/1265

11(0)

## The Groznyy Petroleum Industry

Ch. IV. Development of Techniques of Oil Well Drilling Technology in the Groznyy Oilfields	32
Oil well drilling	32
Construction of derricks	33
Oil well structure	34
Drilling conditions, turbodrills and rock bits	35
Directional turbodrilling	37
Mechanization of the labor-consuming operations	41
Drilling and power equipment	42
Cementing wells	42
Testing wells	43
Ch. V. Development of Technology and Techniques in the Groznyy Oilfields	45
Ch. VI. Development of Techniques and Refining Technology in the Groznyy Petroleum Industry	53
Conclusion	58
AVAILABLE: Library of Congress	
Card 3/3	

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Effect of adrenosterone on the transformation of hydrocortisone  
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gorm. 11 no.2:72-75 Mr-Ap '65. (MIRA 18:7)

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APPROVED FOR RELEASE: 06/13/2000

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no.10:13 O '62. (MIRA 16:6)

(Frozen ground)

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SOV-98-58-8-13/22

AUTHORS: Berzhanvskiye, K.V., Filonovich, R.P., Engineers

TITLE: The Transportation of Concrete Mixtures by Automobiles  
(O perevozke betonnoy smesi avtotransportom)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 8, p 45 (USSR)  
<sup>17</sup>

ABSTRACT: In connection with an article by Yu.N. Solov'yev "Construct  
Automobiles for the Transportation of the Concrete" published  
in Nr 5 (1957) of this periodical, the author finds that many  
of definitions propounded by Solov'yev are unfounded.  
There is 1 diagram.

1. Concrete--Handling    2. Automobiles--Applications

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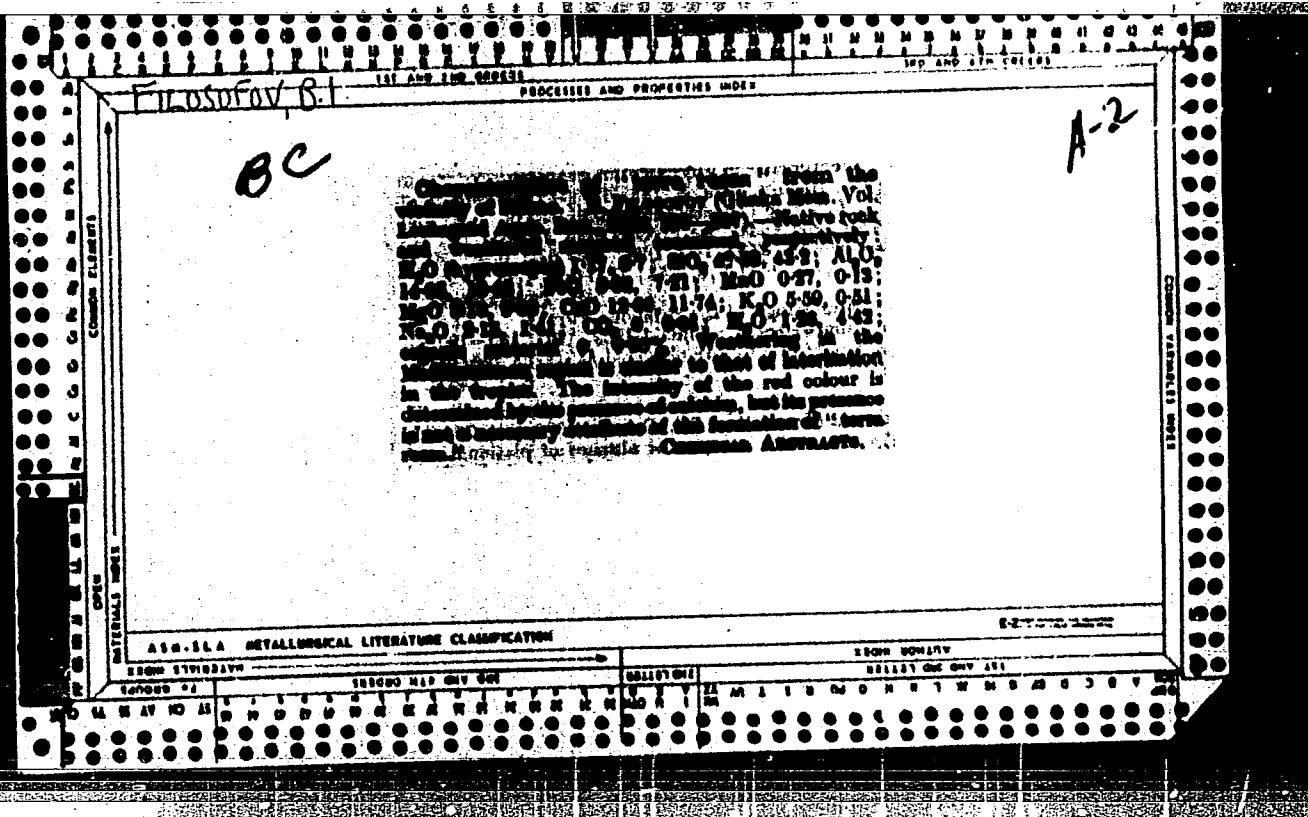
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Warszawa.

GUREVICH, S.M.; DIDKOVSKIY, V.P.; NOVIKOV, Yu.K.; FILORIK'YAN, B.K. (Moskva);  
ZASETSKIY, G.F. (Moskva); KRAVCHENKO, V.F. (Moskva); NOVIKOVA, A.A. (Moskva)

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